Attorney Docket No. 033035.088

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Takashi NAKABAYASHI et al.

Serial No.:

10/079,817

Examiner:

UNASSIGNED

Filed:

February 22, 2002

Group Art Unit: UNASSIGNED

For:

LIGHT GENERATING MODULE

PRELIMINARY AMENDMENT

Commissioner for Patents Washington, D.C. 20231

Sir:

Prior to or concurrent with examination, kindly amend the above-identified application as follows:

IN THE SPECIFICATION:

Applicants have attached to this Amendment documents entitled "Marked-up Copy of the Specification" and "Amended Specification". Please amend the specification as shown in the document entitled "Marked-up Copy of the Specification".

IN THE CLAIMS:

Applicants have attached to this Amendment documents entitled "Marked-up Copy of the Claims" and "Amended Claims". Please amend the claims as shown in the document entitled "Marked-up Copy of the Claims".

REMARKS

Entry and consideration of this Preliminary Amendment are respectfully requested prior to or concurrent with examination. By this Preliminary Amendment, Applicants are attending to correction of inadvertent errors in the specification, and in the claims. No new matter is added by these corrections.

Respectfully submitted,

SMITH, GAMBRELL & RUSSELL, LLP

By:

Michael A. Makuch, Reg. No. 32,263 1850 M Street, N.W., Suite 800

Washington, D.C. 20036 Telephone: (202) 659-2811 Fax: (202) 263-4329

July 3, 2002

Marked-up Copy of the Specification

Page 26, first paragraph:

The semiconductor light-emitting device 62 has a light-transmitting surface 62a and a light reflecting surface 62b. The grating 70e and the light-reflecting surface 4b form an optical cavity for the light generating module 60. The reflectivity of the light-reflecting surface 4b is greater than that of the light-transmitting surface 4a. The reflectivity of the light-transmitting surface 4a is faced to the light-receiving surface 8a of the semiconductor [light-emitting] <u>light-receiving</u> device 8.

Marked-up Copy of the Claims

2. (Amended) The light generating module according to claim 1, further comprising:

a first mounting member having first, second and third regions arranged sequentially in a direction of a predetermined axis; and

a second mounting member, located in said third region of said <u>first</u> mounting member, having a support surface;

wherein said monitoring light-receiving element is provided on said support surface;
wherein said monitoring light-receiving element has a light-detecting region for detecting light;

wherein said driving element is provided on said second region of said first mounting member;

wherein said semiconductor light-emitting device is provided on said first region of said first mounting member;

wherein said semiconductor light-emitting device has a pair of end surfaces and an active layer, said active layer extending from one of said pair of end surfaces to the other thereof;

wherein a region provided by said housing [are] is divided into first and second sections by a plane extending along said active layer;

wherein said monitoring light-receiving element has a light-detection region provided in said first section; and

wherein said driving element is provided in said second section.

3. (Amended) The light generating module according to claim 1, further comprising:

a first mounting member having first, second and third regions arranged sequentially in a direction of a predetermined axis; and

a second mounting member having a support surface and provided in said third region of said first mounting member;

wherein said monitoring light-receiving element is provided on said support surface;
wherein said monitoring light-receiving element has a light-detecting region for detecting light;

wherein said driving element is provided on said second region of said first mounting member;

wherein said semiconductor light-emitting device is provided on said first region of said first mounting member;

wherein said semiconductor light-emitting device has a pair of end surfaces and an active layer, said active layer extending from one of said pair of end surfaces to the other thereof;

wherein a region provided by said housing [are] is divided into first and second sections by a plane extending along said active layer;

wherein said monitoring light-receiving element has a light-detection region including first and second portions, said first portion being provided in said first section, and said second portion being provided in said second section; and

wherein said driving element is provided in said second section.

19. (Amended) The light generating module according to claim 1, wherein said housing has a plurality of wall portions and a plurality of lead terminals;

wherein said light generating module further comprises a substrate provided between said driving element and one of said plurality of wall portions, and

wherein said substrate has a pair of wirings of transmitting differential modulation signals to said driving element, and each [transmission line] wiring has one end electrically connected to said driving element and another end electrically connected to one lead terminal of said lead terminals.

Amended Specification

Page 42, second paragraph:

The semiconductor light-emitting device 62 has a light-transmitting surface 62a and a light reflecting surface 62b. The grating 70e and the light-reflecting surface 4b form an optical cavity for the light generating module 60. The reflectivity of the light-reflecting surface 4b is greater than that of the light-transmitting surface 4a. The reflectivity of the light-transmitting surface 4a is faced to the light-receiving surface 8a of the semiconductor light-receiving device 8.

Amended Claims

2. (Amended) The light generating module according to claim 1, further comprising:

a first mounting member having first, second and third regions arranged sequentially in a direction of a predetermined axis; and

a second mounting member, located in said third region of said first mounting member, having a support surface;

wherein said monitoring light-receiving element is provided on said support surface;
wherein said monitoring light-receiving element has a light-detecting region for detecting light;

wherein said driving element is provided on said second region of said first mounting member;

wherein said semiconductor light-emitting device is provided on said first region of said first mounting member;

wherein said semiconductor light-emitting device has a pair of end surfaces and an active layer, said active layer extending from one of said pair of end surfaces to the other thereof;

wherein a region provided by said housing is divided into first and second sections by a plane extending along said active layer;

wherein said monitoring light-receiving element has a light-detection region provided in said first section; and

wherein said driving element is provided in said second section.

3. (Amended) The light generating module according to claim 1, further comprising:

a first mounting member having first, second and third regions arranged sequentially in a direction of a predetermined axis; and

a second mounting member having a support surface and provided in said third region of said first mounting member;

wherein said monitoring light-receiving element is provided on said support surface;
wherein said monitoring light-receiving element has a light-detecting region for detecting light;

wherein said driving element is provided on said second region of said first mounting member;

wherein said semiconductor light-emitting device is provided on said first region of said first mounting member;

wherein said semiconductor light-emitting device has a pair of end surfaces and an active layer, said active layer extending from one of said pair of end surfaces to the other thereof;

wherein a region provided by said housing is divided into first and second sections by a plane extending along said active layer;

wherein said monitoring light-receiving element has a light-detection region including first and second portions, said first portion being provided in said first section, and said second portion being provided in said second section; and

wherein said driving element is provided in said second section.

19. (Amended) The light generating module according to claim 1, wherein said housing has a plurality of wall portions and a plurality of lead terminals;

wherein said light generating module further comprises a substrate provided between said driving element and one of said plurality of wall portions, and

wherein said substrate has a pair of wirings of transmitting differential modulation signals to said driving element, and each wiring has one end electrically connected to said driving element and another end electrically connected to one lead terminal of said lead terminals.